

Addressing Discipline Disparities for Black Male Students: Linking Malleable Root Causes to Feasible and Effective Practices

Clayton R. Cook
University of Minnesota

Mylien T. Duong
University of Washington

Kent McIntosh
University of Oregon

Aria E. Fiat
Madeline Larson
University of Minnesota

Michael D. Pullmann
University of Washington

Jenna McGinnis
University of Minnesota

Abstract. Longstanding discipline disparities for Black male students are associated with untoward outcomes and necessitate feasible and effective school-based solutions. This study examined the efficacy of GREET–STOP–PROMPT (GSP) as a low-cost, potentially high-yield strategy designed to intervene on putative malleable root causes proximal to teacher–student interactions. GSP relies on three core components to mitigate proximal causes of exclusionary discipline decisions, including: (a) proactive classroom management strategies; (b) a self-regulation technique to mitigate the impact of teacher biases on the response to problem behavior; and (c) reactive strategies to increase empathic, consistent, and appropriate responses to problem behavior. Overall, results from a single case experimental concurrent multiple baseline design across schools indicated that the GSP strategy yielded systematic reductions in risk ratios. More specifically, these results showed that the likelihood of Black male students receiving an office referral was cut by two thirds following implementation of the GSP strategy. In addition, findings from this study indicated that Black male students’ self-reported school connections significantly improved from pre- to postintervention. Implications, limitations, and future directions of the results are discussed.

Keywords: Discipline disparities, disproportionality, exclusionary discipline, malleable root cause factors

Schools nationwide are under immense pressure to address the overuse of exclusionary disciplinary practices (e.g., suspensions, office referrals [Okonofua, Paunesku, & Walton, 2016; Skiba & Losen, 2016]). Overuse of these practices remove students from learning opportunities, undermine academic achievement, alienate students from their teachers and peers, and negatively impact school climate (Reynolds

et al., 2008; Townsend, 2000). Despite longstanding attention to this issue, the use of exclusionary disciplinary practices remains high (Skiba & Losen, 2016; U.S. Department of Education Office for Civil Rights, 2012, 2014). Further, students of color—particularly Black males—make up the largest proportion of students who receive exclusionary discipline (Girvan, Gion, McIntosh, & Smolkowski, 2016;

Correspondence regarding this article should be addressed to Dr. Clayton Cook, 56 East River Road, Educational Sciences Building, University of Minnesota, Minneapolis, MN 55915; e-mail: crcook@umn.edu

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Losen, Hodson, Keith, Morrison, & Belway, 2015). For example, a large body of literature indicates that Black males receive suspensions and office referrals at rates two to three times higher than their White peers (e.g., Bradshaw, Mitchell, & Leaf, 2010; U.S. Department of Education Office for Civil Rights, 2012, 2014).

Discipline disparities are alarming considering the established link to the school-to-prison pipeline and opportunity gaps that result in untoward outcomes for Black students, such as school disengagement, dropout, and incarceration (Elias, 2013; Fabelo et al., 2011; Milner, 2012). Unfortunately, findings nationwide show that Black students in particular are disciplined more harshly for less severe and more subjective misconduct such as dress code violations, defiance, and disrespect, while White students are disciplined for more objective offenses such as vandalism or truancy (Losen & Orfield, 2002; Skiba et al., 2008). As a result, Black students are more likely to exhibit a sense of mistrust and lack of bonding with teachers (Okonofua, Walton, & Eberhardt, 2016), which worsens students' relationships with school staff, perpetuates cultural misunderstanding (Verdugo, 2002), and impairs students' satisfaction with school (Baker, 1999). Given the pervasiveness of discipline disparities and the negative consequences associated with these practices, it is clear that solutions are needed.

Putative Explanations for Discipline Disparities

With a national spotlight on this issue, the paucity of viable, potentially effective solutions to reduce discipline disparities has become even more evident. Numerous explanatory factors have been proposed as putative (i.e., hypothesized) causes for discipline disparities that exist for Black male students (Carter, Skiba, Arredondo, & Pollock, 2014). Factors such as economic disadvantage and historical oppression are likely contributors to Black disproportionality (Skiba, Michael, Nardo, & Peterson, 2002). However, from an intervention standpoint, these factors are not useful because they are not readily malleable nor do they fully capture the microsystemic factors within the school setting that explain why Black male disproportionality exists (Skiba et al., 2002). Even after controlling for socioeconomic status and other demographic characteristics, discipline disparities still exist for Black students (Skiba, Poloni-Staudinger, Simmons, Feggins-Azziz, & Chung, 2005). Another potential contributor to discipline disparities is the cultural mismatch between a predominantly White female workforce and Black students. White teachers may be unfamiliar with the interaction patterns of Black males, and thus misinterpret their behaviors as disrespectful or inappropriate (Townsend, 2000). Moreover, discipline policies have been argued to represent a significant factor leading to discipline disparities, with specific suggestions to create more progressive and equitable discipline policies and procedures in response to problem behavior (Fenning & Rose, 2007). Notwithstanding the contributions of the above factors to explain discipline disparities, research has demonstrated that there are other putative explanations for

discipline disparities that lend themselves to potentially more malleable, feasible, and proximal targets for intervention that impact educator–student interactions.

Implicit Bias

Educators' implicit biases may also contribute to discipline disparities. Implicit bias refers to discriminatory biases that operate outside of conscious awareness and attentional focus but nevertheless can result in inaccurate, unwise, or unjust responses toward particular individuals (Greenwald & Krieger, 2006; Staats, Capatosto, Wright, & Contractor, 2015). Research has shown that implicit biases render people's decision making vulnerable and can produce behavior that departs from a person's endorsed beliefs (e.g., Dovidio, Glick, & Rudman, 2005). In an experiment, Graham and Lowery (2004) showed that police and probation officers primed with race-related words in the category "Black" recommended harsher punishments. Similarly, teachers who were randomly assigned to a Black priming condition were significantly more likely to endorse punitive disciplinary responses and referral for special education under the category of emotional disturbance, when compared to a White priming condition, and those who endorsed the highest ratings for punitive discipline had the highest implicit bias scores from the implicit association test (Xie, 2015). Fortunately, initial research has indicated that brief training in awareness of implicit biases and use of alternative strategies can reduce the effects of implicit bias (Devine, Forscher, Austin, & Cox, 2012).

Proactive and Reactive Classroom Management

Teachers who are insufficiently prepared with classroom management strategies to proactively prevent problems and effectively respond to problem behaviors may contribute to discipline disparities (Skiba et al., 2011). Lack of skills in this area becomes particularly problematic when it interfaces with the needs of students who live in poverty (e.g., exhibiting behaviors inconsistent with the expectations of a more rigid school environment) that create more situations in which educators' decision-making is vulnerable to implicit biases (e.g., reacting to perceived problem behavior due to limited proactive behavior management). Indeed, findings indicate that the average teacher has received insufficient pre- and inservice training to deliver effective classroom management strategies (Chesley & Jordan, 2012; Christofferson & Sullivan, 2015; Oliver & Reschly, 2007). Further, many educators report that preventing and responding to problem behaviors is one of the most significant challenges and stressors they face (Bushaw & Calderon, 2014a, 2014b), yet they report having low levels of self-efficacy (Dicke et al., 2014). When educators lack the knowledge, skills, and self-efficacy to prevent and address perceived problem behavior, there is an increased likelihood that they will rely more on exclusionary discipline to address problem behavior (Skiba & Peterson, 2003).

Linking Putative Malleable Root Causes to Solutions

Putative malleable root causes reflect hypothesized mechanisms that cause discipline disparities that are capable

of being changed via intervention. Some of the putative malleable root causes of discipline disparities represent more feasible targets for change than others, when considered in the context of everyday school settings and the factors that impact successful uptake and use of new practices (e.g., training time, staff, and resources available to schools and competing demands from other initiatives). These malleable factors include proactive behavioral supports to prevent problem behavior (Vincent, Sprague, Pavel, Tobin, & Gau, 2015), disciplinary policies (Hoffman, 2014), multicultural awareness and competence (Monroe, 2005), reactive classroom management strategies when responding to problem behavior to maintain the student in the learning environment (Losen & Gillespie, 2012), and recognition of implicit biases among teachers (Carter et al., 2007). Although improvements in school policy and multicultural competency are important to create lasting equitable outcomes for students, professional development targeting actual practices that are most proximal to student behavior are likely to have a more significant impact, given the influence of educator–student interactions on student behavioral outcomes (Hattie, 2008).

Teacher professional development that focuses on classroom practices has been cited as a promising method to address disproportionality (Bradshaw et al., 2010; McIntosh, Girvan, Horner, & Smolkowski, 2014). Prior research suggests that enhancing teachers' proactive behavior management skills, in order to minimize the need for disciplinary action, could reduce disproportionality (McIntosh, Barnes, Eliason, & Morris, 2014). Specifically, teachers who are trained and supported to set high expectations for student behavior and reinforce positive behavior (Gregory & Weinstein, 2008), intentionally connect with students to establish relationships (Gregory, Clawson, Davis, & Gerewitz, 2016), precorrect problem behavior (Gregory & Weinstein, 2008), and maintain a 5-to-1 ratio of positive-to-negative interactions with students (Cook et al., 2017) are likely to promote higher rates of student engagement and prevent problem behaviors that necessitate a response that may involve exclusionary discipline.

Equally important is providing teachers with the skills to respond appropriately, consistently, and equitably when transgressions do occur (Gregory, Bell, & Pollock, 2016). To do this, teachers need to increase their present moment recognition and regulation of situations in which decisions are vulnerable to implicit biases and may unintentionally impact their use of exclusionary disciplinary for certain students, such as Black males (Ferguson, 2001). Thus, teachers could benefit from a self-regulation strategy that enables them to bring an unconscious process to conscious awareness in order to regulate decision making during situations (i.e., perceived or actual student problem behavior) in which their decision making is vulnerable to snap decisions that involve subjective and potentially inequitable use of exclusionary discipline (McIntosh et al., 2014). Moreover, once educators are able to regulate themselves to mitigate implicit biases and experience greater mental clarity to respond in justified and proportional

way in the moment (McIntosh et al., 2014), they need access to progressive strategies they can implement to correct perceived or actual student problem behavior in a way that maintains the student in the learning environment and preserves their relationship with the student (Okonofua, Walton, & Eberhardt, 2016). Effective reactive strategies can provide alternatives to exclusionary discipline, mitigate the harm associated with punitive interactions, and help children learn alternative prosocial behaviors (Gregory, Clawson, Davis, & Gerewitz, 2016).

Generating Feasible Solutions and Monitoring Outcomes

Many solutions have been proposed to address discipline disproportionality (James, Green, Rodriguez, & Fong, 2008; Klingner et al., 2005), but they are often complex and resource intensive, presenting significant implementation challenges in real-world education settings (McHugh & Barlow, 2010). For example, in a recent experimental study involving 86 classrooms, the My Teaching Partner-Secondary (MTP-S), which is a video-based professional development experience grounded in the Classroom Assessment Scoring System to improve teacher–student interactions, was found to produce no significant discipline disparities between Black students and other students (Gregory, Hafen, et al., 2016). However, adoption and sustainment of MTP-S is likely to be impacted by its associated costs and time required for training and implementation. The ability of evidence-based practices to achieve positive student and school outcomes is often hindered by implementation barriers that result in insufficient adoption, delivery, and sustainment due to costs (Forman et al., 2013). In light of such challenges, development of school-based solutions needs to focus on the dual goals of feasibility and likely effectiveness (Bowen et al., 2010). Feasibility refers to suitability and relative ease for everyday use (Proctor et al., 2011), while likely effectiveness refers to the solution's potential to produce desired changes in outcomes when implemented with fidelity. The development of approaches to reduce discipline disparities needs to be anchored in both feasibility *and* effectiveness in order to optimize its likelihood of achieving equitable practices and student outcomes in real-world school settings.

The Present Study

Ultimately, many school systems across the country are left with explanations for why discipline disparities exist but minimal to no concrete solutions to address disproportionality. Although there is a need for solutions, researchers and practitioners must be mindful that even the most effective and well-intended practices and programs will not result in benefits in everyday settings unless they are adopted and implemented with fidelity (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). In other words, effective practices and programs must be feasible and contextually appropriate, and implementation must be strategically supported in order for

students to receive and benefit from particular practices and programs (Forman et al., 2013). The present study sought to address this gap in the literature by developing and piloting a feasible and potentially effective approach aimed at addressing discipline disparities for Black male students. This study focused on three malleable root causes discussed above to inform the development of the GREET–STOP–PROMPT (GSP) approach, including (a) proactive classroom management strategies to prevent problem behavior; (b) recognition and regulation of situations in which a teacher may be vulnerable to implicit bias; and (c) effective reactive strategies to respond to perceived or actual student problem behaviors in an empathic, consistent, and appropriate way. Next, feasibility (i.e., ease and suitability of practices) and effectiveness (i.e., likelihood of changing putative root cause) parameters were used to hone in on specific practical strategies with evidentiary support to implement within each of the three targeted solutions. This process resulted in the development of the GSP approach, which links practical strategies that likely require minimal training time and follow-up support to apply to each of the malleable putative causal factors. For example, the GREET component includes five proactive classroom management strategies designed to promote academic engagement and prevent the occurrence of problem behaviors. The STOP component consists of educating teachers about implicit biases, as well as providing them with a visual cuing and mindfulness technique to increase their recognition and regulation of behavior during situations in which decision making is potentially vulnerable to implicit biases. Last, the PROMPT component provides teachers with a progressive method of responding to perceived or actual problem behaviors as alternatives to exclusionary discipline. This multi-pronged approach may be beneficial for a number of reasons: (a) discipline disparities are likely multiply determined, with no single factor and standalone approach being able to produce meaningful changes in discipline disparities (McIntosh et al., 2014); (b) integrated approaches are likely to provide greater coverage of practices that make positive outcomes less dependent on high levels of fidelity to a single practice or program (Domitrovich et al., 2010); and (c) each of the three intervention components represents a putative malleable root cause proximal to teacher–student interactions.

Outcome monitoring is an important aspect of evaluating the impact of solutions targeting discipline disparities. The obvious outcome to monitor is the use of exclusionary disciplinary practices, such as office discipline referrals (ODRs), and there are resources for gathering defensible data in this area (McIntosh et al., 2014). Some researchers, however, have voiced concerns about measuring reductions in exclusionary disciplinary practices alone. The concerns surround whether reductions reflect actual changes in practices that correspond to changes in how students experience and behave in school or whether the reductions reflect social and professional censure for referring students (Morrison, Peterson, O'Farrell, & Redding, 2004). Although these concerns have been raised, reductions in office discipline referrals

are linked to improvements in actual student behavior and school climate (Waasdorp, Bradshaw, & Leaf, 2012). Coupling reductions in exclusionary discipline with other outcomes that capture subjective indicators of well-being (e.g., school connection) is important to provide greater coverage of impact and document that reductions do not just represent a shift away from office referrals to other practices that may result in similar untoward outcomes.

Research Questions

This article represents a collaborative study with three urban elementary schools that were seeking to address long-standing discipline disparities for Black male students. Using a single case concurrent multiple baseline across schools design, the aim was to experimentally examine the impact of GSP on reducing discipline disparities for Black male students. Data were also collected on Black male students' sense of school connection to explore whether GSP was associated with changes on an indicator subjective well-being. This study was guided by the following three research questions:

1. Did implementation of the GSP approach result in predictable and systematic reductions in exclusionary disciplinary practices and indices of discipline disparity (i.e., relative risk ratio)?
2. Did implementation of the GSP approach produce improvements in Black male students' self-reported school connection/sense of belonging?
3. Did participating educators find the GSP approach to be feasible, acceptable, and appropriate for use and implement components of it with sufficient fidelity?

Based on these research questions, given the malleable factors targeted by the GSP approach and the inclusion of feasible strategies, we hypothesized that significant reductions in discipline disparities would be observed. Moreover, we hypothesized these changes would be associated with improvements in Black male students' perceptions of their connection to school.

METHOD

Three elementary schools located in the same large urban school district in the western United States participated in this study. All three elementary schools were under Federal and State oversight due to racial disproportionality with regard to exclusionary discipline and special education referral and placement. Disproportionality was determined by comparing composition (i.e., the proportion of students by race/ethnicity in a particular category) and relative risk ratios (comparison of risk for one group in relation to the risk for all other groups). Results indicated that all three schools had relative risk ratios exceeding 2.5, indicating that Black male students were being referred to the office for behavior problems 2.5 times more than any other students.

Participants and Setting

At the time of the study, participating schools were engaged in the second year of a district-wide effort to implement school-wide positive behavior interventions and supports (SW-PBIS) to improve student behavior and promote a positive school climate. Data from the Tiered Fidelity Inventory (TFI; Algozzine et al., 2014) were gathered twice yearly on each of the schools in the district. The three participating elementary schools' TFI indicated moderate fidelity of implementation of Tier 1 universal level of SWPBIS (see Table 1). Participating schools had also received a year of racial equity training. Administrators from the participating schools were eager to participate in the training, given: (a) the discipline disparities in their school; (b) staff's desire to create more equitable outcomes for students they serve; and (c) pressure from outside federal agencies to address the social injustice issue.

A breakdown of each of the school's student demographics is included in Table 1. As shown, the sample of students across schools was diverse with regard to ethnicity and socioeconomic status. Overall, demographics showed that there was a total of 40 teachers across the three schools, with the majority being female (76%), White (82%), and having more than 7 years of teaching experience ($M = 8.4$, $SD = 5.8$). Thirty-eight of the 40 teachers participated in the GSP training (one from School 1 and one from School 2 declined participation), while an additional three teachers missed part of the training (two from School 2 and one from School 3).

Procedures

This study employed a participatory action research approach in which the investigators collaborated with school administrators from the participating schools to: (a) identify and define the main concern; (b) develop the intervention to target malleable root causes; and (c) determine the most contextually appropriate research methods. Overall, the participatory research project lasted from May 2014 (establishment of the partnership) through May 2015 (completion of the pilot study). Partnership establishment, intervention development, and training occurred from May 2014 through January 2015. The pilot testing of the intervention began in January 2015. Prior to commencing the pilot, approval from the university human subjects and school district research department was obtained. Moreover, in order to gather data from students, parental permission was obtained via classroom teachers with support from university researchers.

The collaborative partnership between school administrators and university researchers occurred in the context of an ongoing district-wide effort to implement SW-PBIS to improve student behavior and promote positive school climate. The school administrators approached the lead author about specific needs within their schools to address discipline disparities for Black male students. Although the district was providing SW-PBIS training to a team of educators within each of their schools, they were specifically seeking out support to engage

Table 1. Demographics of Participating Schools

Schools	TFI SWPBIS % (score)	Teacher Race/Ethnicity					Student Race/Ethnicity						
		Teachers	White	Black	Latino	Other	Students	White	Black	Latino	Asian	Native Amer	FRL
School 1	43% (13/30)	15	10	1	3	1	332	62 (18%)	54 (16%)	179 (52%)	35 (10%)	2 (1%)	238 (69%)
School 2	50% (15/30)	14	10	2	1	1	320	189 (51%)	44 (12%)	43 (12%)	14 (11%)	3 (1%)	95 (26%)
School 3	57% (17/30)	11	7	3	—	1	217	4 (2%)	167 (66%)	38 (15%)	5 (2%)	3 (1%)	242 (96%)

Note. TFI SW-PBIS = Tiered Fidelity Inventory score for Tier 1 school-wide positive behavior intervention and supports; FRL = free and reduced-price lunch.

their entire staff in a sequence of professional development activities geared toward addressing exclusionary disciplinary practices and discipline disparities for Black male students. The lead author met with the central and site administrators to develop the intervention based on a three-step process (see Intervention section) and devise a plan for training and follow-up support.

Training and Follow-Up Support

A feasible and effective professional development plan was created with input from the school administrators to facilitate implementation of the collaboratively developed approach. All certified staff, including teachers, administrators, and professional support staff, participated in the training. The training component of the professional development was delivered by the lead author prior to the beginning of the 2015–2016 school year and consisted of two 3-hour sessions during district protected professional development time that utilized tell-show-do-feedback with a Socratic questioning approach. The first training provided an overview of and rationale for the intervention and engaged participants in learning how to deliver the first two intervention components: (a) GREET to proactively prevent problem behavior and (b) STOP to mitigate the impact of implicit bias on decision making. The second training engaged participants in learning how to deliver the last intervention component, PROMPT (progressively respond to problem behavior), and provided participants with a review of all intervention components. This was followed by a question-and-answer period.

Weekly coaching was provided as follow-up support to the trainings to monitor implementation and provide strategic performance-based feedback to teachers who requested support or were identified as implementing with low fidelity via rubrics. Each of the schools had embedded academic coaches who were used in this study to conduct observations of intervention implementation using fidelity rubrics and deliver performance-based feedback to teachers who requested and/or needed additional support to improve implementation. These coaches received prior training by their district in monitoring intervention fidelity and delivering performance-based feedback via brief interactive communication sessions with teachers. The schools also had grade-level professional learning communities (PLC) that convened biweekly that were devoted during this study to problem-solving issues with delivering GSP components. The PLC meetings were tracked using log sheets that were turned in to the school administrator. Finally, daily e-mails were sent each morning with prescribed messages to remind staff to implement particular GSP practices with fidelity (e.g., “Remember, the time spent implementing a proactive strategy confers more time on the backend. Today focus on positive greeting your students at the door to connect with them and precorrect any behavior problems.”).

Design

Collaborative discussions between researchers and the school administrators were used to determine a rigorous and

contextually appropriate design to examine the impact of GSP. A priority for administrators was that all staff within each of the schools would eventually receive training and support to implement the intervention. Researchers and administrators decided on a single case experimental concurrent multiple baseline design (MBD) across schools that would meet the goals of both parties. Via extended baselines across schools and systematic introduction of the independent variable, MBDs provide replication and demonstration of a functional relationship between the independent and dependent variables. The MBD employed in this study consisted of simultaneously gathering baseline data across all schools. Once stability was achieved, the independent variable was introduced for one of the schools while baseline conditions were maintained for the other two. After change was observed in the first school, the independent variable was introduced to the subsequent school. Baseline data at its core is gathered to provide prediction about a behavior; that is, if all remained the same, what does the behavior pattern look like? If a stable baseline pattern can be collected and demonstrates room for behavioral change, then the intervention can be initiated. Thus, for the purposes of this study, if baseline data were visually stable and there was no confounding data point (i.e., a data point indicating no improvement in dependent variable), then the intervention was initiated for the first school to provide support that is as timely and responsive as possible. Although certain researchers recommend a minimum of three data points during baseline, others argue that more important than the number of data points is stability in the data for purposes of prediction (Center, Skiba, & Casey, 1985; Cooper, Heron, & Heward, 2006). Schools were randomly assigned to the order in which they would receive professional development and begin implementation of the GSP approach, which improves methodological rigor and internal validity of the findings (Kratochwill & Levin, 2010).

Intervention

A three-step process was used to develop the implementation approach focused on the overuse of exclusionary discipline practices in general and discipline disparities for Black male students specifically. First, researchers and administrators identified putative malleable root causal factors of discipline disparities that are proximal to teacher–student interactions. Second, feasibility (suitability, affordability, and potential ease of impact) was used to narrow the focus to a coherent and manageable subset of malleable factors. In collaboration with the school administrators, this resulted in the identification of three malleable putative root cause factors: (a) insufficient knowledge, skills, and self-efficacy with regard to proactive classroom management practices; (b) lack of recognition and regulation of behavior during situations in which decisions are vulnerable to implicit bias; and (c) lack of effective reactive strategies in response to perceived or actual problem behavior as alternatives to exclusionary discipline. Finally, each malleable factor was linked to specific

Table 2. Linking Malleable Putative Root Causes to GREET–STOP–PROMPT Practices

Malleable Putative Root Cause	Purpose and Rationale for Solution	Specific Practices
Inadequate knowledge, skills, and self-efficacy with regard to proactive classroom management	Educators need to be equipped with the knowledge, skills, and confidence to proactively manage behavior so there are fewer behavior problems to address.	Specific evidence-based proactive classroom management techniques (GREET) <ul style="list-style-type: none"> • Greet students positively at the door • Reinforce students frequently, specifically, and contingently • Establish, review, and cue behavioral expectations • Engage students by providing opportunities to respond • Take time to voice high expectations and belief in the student (wise feedback)
Lack of recognition and regulation of implicit biases toward Black male students	Educators need to learn how to recognize and regulate their behavior in response to situations in which they are vulnerable to implicit biases that could negatively impact their decisions to engage in an exclusionary discipline action.	Mindful STOP techniques to increase self-regulation and effective decision making <ul style="list-style-type: none"> • Stop and do not do anything immediately in reaction to the perceived problem behavior • Take a breath to regulate yourself • Observe your knee-jerk reaction • Proceed positively by doing what is most effective (not what you initially feel like saying or doing)
Insufficient training in progressive methods of responding to perceived or actual problem behavior as alternatives to exclusionary discipline practices	Educators must learn how to progressively respond to problem behavior in an empathic, consistent, and appropriate manner in order to correct behavior, maintain the student in the learning environment, and preserve the relationship with the student.	A progressive system of responding effectively to perceived or actual problem behavior (PROMPT) <ul style="list-style-type: none"> • Proximity as the initial method to correct behavior • Redirection tactics to get the behavior back on track • Ongoing monitoring to shape behavior and capitalize on social learning (reinforcing peers) • Prompt the student privately with an effective command • Teach the student through a skilful communicative interaction (empathy statement, label the inappropriate behavior, label the appropriate behavior, give a rationale, outline the choices for the student to make, warn of a natural and logical consequence, give the student think time, and check back with the student)

practices that were easy to understand, straightforward to implement, and likely effective (i.e., evidence-informed). This process resulted in the development of the GSP approach (see Table 2 for an overview).

GREET

The GREET component was designed to increase educators' knowledge, skills, and self-efficacy with regard to the delivery of proactive classroom management practices. GREET is an acronym that stands for five distinct yet complementary proactive classroom management strategies. The "G" stands for *greet students at the door*. This strategy is designed to engage students in a relationship with the teacher when

students transition into the classroom, as well as provide pre-corrective statements to prevent behavior problems. Research has shown this to be an effective proactive classroom management strategy (Allday, Bush, Ticknor, & Walker, 2011; Allday & Pakurar, 2007; Cook et al., 2017). The "R" stands for *reinforcing students contingently, specifically, and frequently*. This practice was predicated on the extensive empirical support for behavior-specific praise (Briere, Simonsen, Sugai, & Myers, 2015). The first "E" stands for *establish, review, and cue behavioral expectations*. This practice is a core component of classroom-level SW-PBIS and involves intentionally teaching, reviewing, and cuing students to exhibit clearly defined behavioral expectations that lead to success in the classroom

(Reinke, Herman, & Stormont, 2013). The second “E” stands for *engage students by providing numerous opportunities to respond*. Providing opportunities to respond is among the most widely researched proactive strategies. It involves engaging students academically by integrating regular active student response to questions or statements. Students may respond verbally, or with gestures or actions, and may do so either chorally or individually (Cavanaugh, 2013). Finally, the “T” stands for *take time to deliver wise feedback*. Wise feedback is based in social psychological research and is designed to promote better engagement in the classroom among students who are uncertain about their belonging or mistrust teachers or other school staff (Yeager et al., 2014).

STOP

The STOP component was designed to increase educators’ self-recognition and self-regulation during situations in which their decision-making is vulnerable to implicit biases. The first step involved educating staff about implicit biases and how they come into play during situations in which cognitive resources are limited, such as responding to student problem behaviors. The next step involved training staff on the mindful STOP technique, which provides a cuing and self-regulation strategy that seeks to promote better present moment awareness and impulse control during challenging or difficult situations (Phang, Mukhtar, Ibrahim, Keng, & Mohd Sidik, 2015; Stahl & Goldstein, 2010).

Mindful STOP was incorporated into the intervention to mitigate the negative impact of implicit biases on decision making by teaching staff how to purposefully bring their attention to the present moment in a nonjudgmental manner to prevent knee-jerk reactions when a student engages in a perceived or actual problem behavior. The first step in using the mindful STOP technique involves *stopping and not doing anything* in response to an environmental cue or antecedent. In the case of this study, the environmental cue was student problem behavior. The next step involves the person *taking a deep breath* in order to purposefully bring their attention to the present moment and regulate cognitive (e.g., unhelpful thoughts) and emotional (e.g., anger or frustration) reactions to problem behavior. Following this, the person *observes*, with an open and receptive attitude, what is happening with the student in the external environment and internally to their thoughts, feelings, and impulses. The last step in mindful STOP involves *proceeding positively*, which means that the person should engage in the most effective action in response to the situation—not necessarily what the person feels like saying or doing. To prompt staff to use the mindful STOP technique, a poster with a large red stop sign and each of the STOP steps was printed and displayed in each classroom.

PROMPT

The PROMPT component was designed to address educators’ use of effective and progressive reactive strategies that can be employed in response to problem behavior. PROMPT includes a series of reactive strategies that attempt to correct perceived or actual problem behavior, maintain the student in

the learning environment, and preserve the relationship with the student. Below is a description of each of the PROMPT components.

Proximity control involves physically standing near the student to correct behavior (Kazdin, 1973; Lewis, Colvin, & Sugai, 2000). Teachers were taught that, for many perceived problem behaviors, moving into the vicinity of the student is sufficient and there is no need to disrupt the flow of instruction by interacting with the student or issuing a warning or reprimand. *Redirection strategies* were also taught as a way of correcting problem behavior by making a request of the student that has a low probability of noncompliance, without threatening or warning the student of a disciplinary consequence (Conroy, Sutherland, Snyder, & Marsh, 2008). Examples of redirections include asking the student to hand out papers, collect papers, get a drink of water, sharpen a pencil, or run an errand next door. *Ongoing monitoring* involves shaping a target student’s behavior by recognizing peers who are engaging in the desired behavior or paying close attention to the target student and praising successive approximations to the desired behavior.

This correction procedure capitalizes on principles of social learning (e.g., vicarious reinforcement) and behavioral shaping as ways to correct instances of minor problem behavior and maintain the student in the learning environment. *Prompt desired behavior* involves privately delivering a direct, explicit, and concise verbal command to the student about what he or she should be doing in a calm and nonthreatening manner (Matheson & Shriver, 2005). An effective prompt of command is positively stated (e.g., “Do this” instead of “don’t do that”), singular (one direction at a time), and phrased as a statement, not a question. Ultimately, an effective command tells the student precisely the behavior the teacher wants him or her to exhibit instead of the problem behavior. *Teaching interaction* is a structured method of communicating empathically, consistently, and appropriately to students to turn instances of ongoing problem behavior into teachable moments (Daly et al., 1998). The teaching interaction is grounded in effective communication strategies that are intended to keep the student in a calm and receptive state of mind, so that he or she can learn from the interaction. A successful teaching interaction involves the following communication steps: (a) begin with an empathy statement; (b) label the inappropriate behavior; (c) label the appropriate behavior; (d) give a rationale for the appropriate behavior; (e) set a limit by warning of a natural and logical classroom-based consequence; (f) put the student in a decisional dilemma by giving them a brief period to think about the decision they want to make; and (g) either reinforce the student for making a good choice or deliver the consequence.

Measures

Exclusionary Discipline

ODR data were collected using the School-Wide Information System (SWIS; May et al., 2003) to track incidents of exclusionary discipline. SWIS is a Web-based system used by the school staff to collect and manage ODR data. Both major

(e.g., verbal threats, fighting, and property destruction) and minor (e.g., physical contact, disruption, and property misuse) office referrals were aggregated and used. Staff within each of the participating schools received prior training in the use of SWIS to complete the referral form to ensure consistent documentation of incidents across staff and support implementation of SW-PBIS (see Irvin, Tobin, Sprague, Sugai, & Vincent, 2004).

School Connection/Belonging

The school connectedness subscale from the Student Subjective Wellbeing Questionnaire (SSWQ; Renshaw, Long, & Cook, 2015) was used to examine student connection/belonging to school. The SSWQ is a self-report measure of key indicators of student well-being in the context of their schooling experiences. The school connectedness subscale includes four items that are all positively phrased (e.g., “I feel like I belong at my school”), requiring no reverse scoring. Each item is arranged along a four-point scale (1 = *almost never*, 2 = *sometimes*, 3 = *often*, 4 = *almost always*). Previous research shows that the school connectedness scale produces adequate internal reliability estimates ($\alpha > .70$; Renshaw et al., 2014), and convergent and divergent relationships with other measures supporting its construct validity (Renshaw et al., 2014; Renshaw & Chenier, 2016).

Intervention Acceptability and Feasibility

Intervention acceptability and feasibility was measured with items from the Usage Rating Profile-Intervention Rating (URP-IR; Chafouleas, Briesch, Neugebauer, & Riley-Tillman, 2011). Teachers rate items on a 6-point scale, with responses that range from “*strongly disagree*” to “*strongly agree*.” For the purposes of this study, we used three items from the acceptability subscale (“The GSP intervention is an effective choice for preventing and responding to problem behavior,” “The intervention is a fair way to handle the children’s behavior problem,” “I would have positive attitudes about implementing the GSP”) and three items from the feasibility subscale (“Preparation needed for this intervention is minimal,” “The total time required to implement the GSP procedures was manageable,” “I was able to allocate my time to implement the GSP intervention”). Acceptability and feasibility data were collected only at postintervention.

Intervention Fidelity

A fidelity rubric was developed using established guidelines (Sanetti & Kratochwill, 2009) to monitor and evaluate fidelity of implementation of the GSP approach. To develop the fidelity rubric, operational definitions were created for each of the practices (e.g., greet students positively at the door) within intervention components (GREET). Next, a self-report form was developed to capture adherence (accuracy) with implementation of each of the three main components of the GSP intervention. Data were gathered on a daily basis from teachers. Data were then aggregated to produce both individual teacher and school-level fidelity estimates across each of the three intervention components (i.e., GREET, STOP, and PROMPT) and the total intervention.

Data Analytic Plan

The primary outcome variables included in the MBD graphs were relative risk ratios calculated based upon ODR data gathered via SWIS. A relative risk ratio represents a ratio of the probability of an event occurring (e.g., receiving an office referral) for one group (e.g., Black male students) compared to the probability of the event occurring in a comparison group (e.g., all other students). In this study, risk ratio was computed by examining the probability of Black male students receiving an office referral compared to the probability of all other students receiving an office referral:

$$RR = \frac{\text{Probability of Black male student}}{\text{Probability of All Other Students}} \quad (1)$$

Risk ratios were calculated on a weekly basis and plotted as times series data in the MBD graphs.

To analyze and interpret the results displayed in the MBD graphs, a combination of visual analysis and single case effect size estimates was used. According to What Works Clearinghouse standards (WWC; Kratochwill et al., 2010), a causal relation is demonstrated if data visually portray at least three demonstrations of an effect at a minimum of three different points in time. Visual analysis examines stability in baseline; within phase stability to demonstrate a predictable pattern; and between phase comparisons to assess whether the introduction of the intervention was associated with an impact on the dependent variables (Horner et al., 2005; Kahng et al., 2010). To cross-validate the results from visual analysis, two single case effect size estimates were computed: Tau-U (Tau-U; Parker, Vannest, Davis, & Sauber, 2011) and the non-overlap of all pairs (NAP; Parker & Vannest, 2009). The Tau-U then represents the percent of intervention data points that were below the median level identified via baseline. Interventions that yield effect size estimates greater than 90% are considered highly effective and those yielding effect size estimates between 75% and 90% are considered effective. When effect size estimates fall below 75%, results are considered questionable. The NAP is an estimate of the extent to which each baseline data point overlaps with each intervention data point and was determined by calculating the percent of nonoverlapping pairs across all comparisons between baseline and intervention data points.

RESULTS

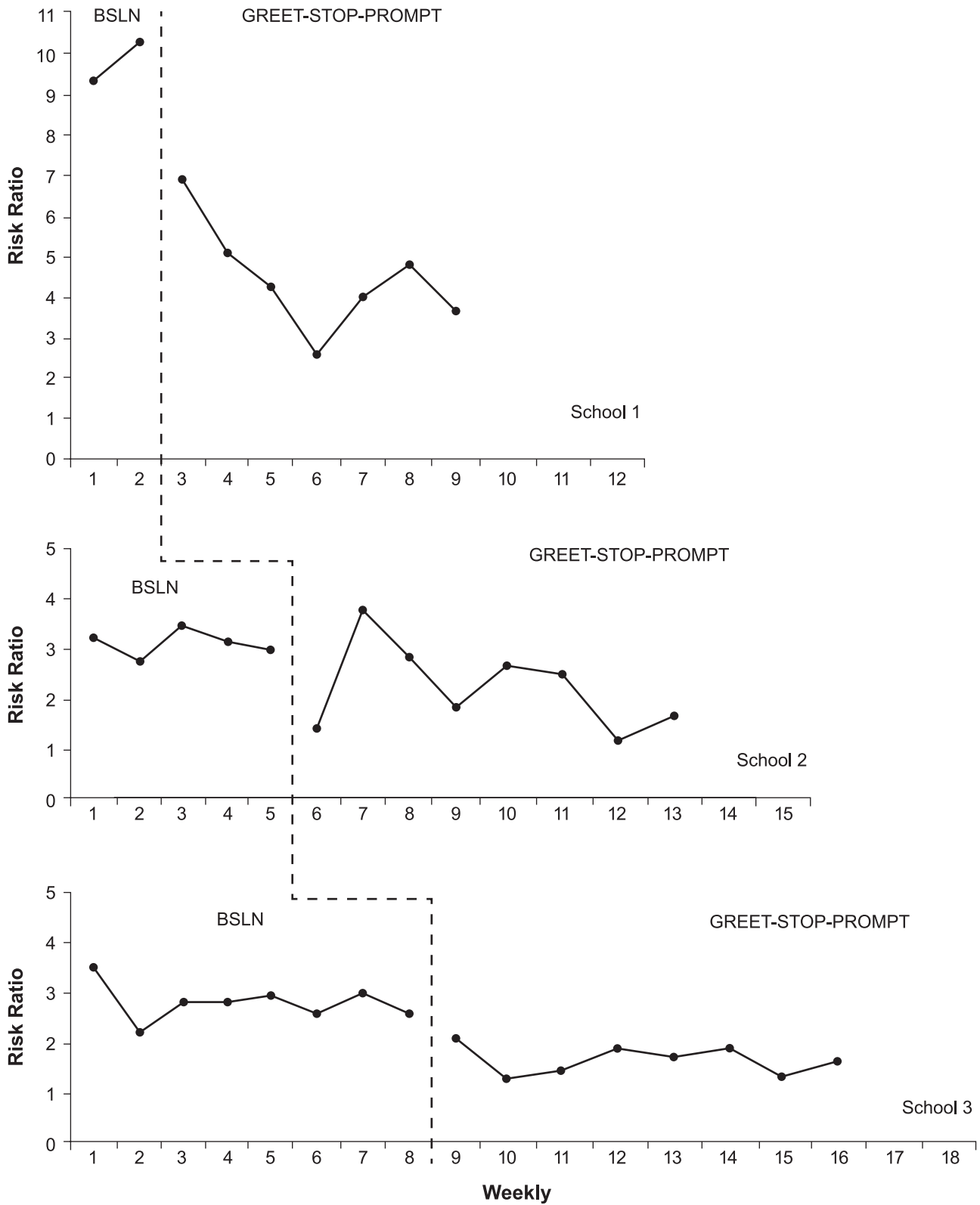
The following organizes the results for each of the proposed research questions, beginning with the visual analysis of the multiple baseline across schools design.

Research Question 1

Visual Analysis of Multiple Baseline Design

Figure 1 presents the multiple baseline across schools graph, using relative risk ratios as the dependent variable. All three schools displayed average levels of relative risk ratios

Figure 1. Multiple Baseline Design Across Schools



above 2.5 during baseline measurement, indicating that Black male students across schools were 2.5 times more likely to be referred to the office than other students. To examine whether race and gender were confounded, relative risk ratios with White males as a specific referent group were calculated. These relative risk ratios were School 1 = 5.4, School 2 = 2.3, and School 3 = 1.9, indicating that across the three schools Black students were 3.2 times more likely to receive exclusionary discipline than their White male classmates. Although the relative risk ratios were smaller in magnitude when using White males as the referent group, estimates for each school continued to indicate significant discipline disparities. As a result, the decision was made to use relative risk ratios with all other students as the comparison group.

School 1's relative risk ratio was notably higher than that of School 2 and School 3 and it only had two baseline data points considering that stability was observed to establish prediction and there was no confounding data point (see Method section for rationale). Despite differences among schools' baseline relative risk ratio, visual inspection of the graphs revealed relative stability in baseline risk ratios for all three schools (despite a short baseline phase for School 1), with immediate reductions in relative risk ratios not observed until the GSP intervention was introduced. In examining the graphs collectively, School 1's relative risk ratio decreased observably after initial implementation of the GSP and continued to decrease steadily until week six, at which point it plateaued. Meanwhile, School 2's relative risk ratio remained relatively stable during baseline. However, once teachers received training in the GSP method, School 2 demonstrated an overall reduction in its relative risk ratio, characterized by some instability but an observable change in the level of relative risk ratio. Visual analysis of School 3's data path revealed a relatively flat and stable trend at baseline. Following the implementation of the GSP method after an extended baseline, an immediate decrease in the level of School 3's relative risk ratio was observed. For Schools 1 and 3, 100% of the data remained lower than baseline ratings. The same was true for School 2, with the exception of one data point at week seven.

Overall, visual inspection of the graphs revealed relative stability in baseline risk ratios, with reductions in relative risk ratios observed immediately after the systematic introduction of GSP intervention. The strongest effects were observed in the form of level and immediacy of effect, with weaker effects in terms of trend. Collectively, the data demonstrated three replications of an effect when comparing intervention to baseline phases and across at least three data points, consistent with WWC guidelines for determining a causal impact of the intervention, except for the small number of baseline data points for Schools 1 and 2 (What Works Clearinghouse, 2014).

Single Case Effect Size Estimates

The Tau-U estimates for School 1, School 2, and School 3 were 100%, 73%, and 100%, respectively, indicating that the vast majority of the schools' intervention data points were below their respective medians. The Tau-U weighted average for all three schools was 90%. The NAP results for School 1, School 2, and School 3 were 100%, 86%, and 100%, respectively, indicating that the majority of the intervention data points did not overlap with baseline data points. The NAP weighted average for all three schools was 96%. Results for all three schools (TAU-U and NAP > 90%) suggest the GSP was an effective method for reducing schools' relative risk ratios. It is important to note that overlapping data points between intervention and baseline phases is common in intervention studies and should be considered in interpreting data, but it does not rule out an intervention effect (Parker & Vannest, 2009; Scruggs, Mastropieri, & Casto, 1987). Together, the results from the Tau-U and NAP estimates corroborated the findings from the visual analysis of MBD graphs, providing additional evidence supporting the efficacy of GSP across all schools.

Research Question 2

Descriptive data for the dependent variables is summarized in Table 3 for each participating school. Favorable pre-post changes were observed across all three dependent

Table 3. Pre and Post Descriptive Statistics for Outcome Measures

Schools	ODRs per 100 Students per Week		Relative Risk Ratio		School Connection	
	Pre- <i>M</i>	Post- <i>M</i>	Pre- <i>M</i>	Post- <i>M</i>	Pre- <i>M</i> (<i>SD</i>)	Post- <i>M</i> (<i>SD</i>)
School 1	9.9	4.8	9.8	3.6	7.9 (1.8)	9.2 (2.0)
School 2	7.2	3.1	3.2	2.1	8.3 (2.1)	10.0 (2.2)
School 3	14.8	7.4	2.9	1.5	10.7 (2.6)	11.7 (2.2)
Totals	10.6	5.1	6.9	2.3	9.0 (2.2)	12.4 (2.1)

Note. ODR = office discipline referral.

variables for each school. Specifically, these data indicated that participation in the GSP was associated with a 15% increase in student-reported school connection across all three schools, which was statistically significant [$t(80 = 6.0, p < .001)$]. This finding provides additional evidence supporting the implementation of the practices embedded within GSP to not only reduce exclusionary discipline but also improve the Black male student experience as reflected by a key indicator of student subjective well-being. As for the disciplinary data, across all schools, the number of ODRs per student per week was halved and the relative risk ratio was reduced by two thirds.

Research Question 3

Acceptability and Feasibility

The acceptability and feasibility data are displayed in Table 4. Mean ratings for the acceptability and feasibility revealed that, on average, educators across all three schools found the GSP intervention to be acceptable and feasible for implementation in elementary school settings. Acceptability ratings were slightly higher for all three schools than feasibility ratings. Moreover, educators in School 1 provided the highest ratings of both acceptability and feasibility, and educators in School 3 provided the lowest ratings. Although the majority of educator ratings were high, there were a few educators within each of the schools who found the intervention to be unacceptable and not feasible to implement.

Intervention Fidelity

Data for intervention fidelity are displayed in Table 5. As shown, average intervention fidelity ratings for all the components were above 75%. Variability in intervention fidelity was larger within schools than between schools. The

largest range within school was 25%–100%. Overall, the GREET practices were implemented with the highest fidelity, followed by STOP, and then PROMPT. School 1 had the highest mean intervention fidelity ratings across all three intervention components, while School 3 had the lowest fidelity ratings. Overall, the results indicated the GSP was implemented with adequate fidelity, which provides evidence supporting the internal validity of the study findings.

DISCUSSION

Despite decades of attention to and commentary on discipline disparities for Black male students, few studies have experimentally examined the impact of specific approaches to address those disparities (McIntosh et al., 2014). Moreover, numerous researchers have identified malleable root causes of discipline disparities, but few have translated these factors into feasible and effective solutions that schools can implement to address discipline disparities. In response to these gaps in research and practice, the purpose of this study was to develop and test a feasible and effective approach to address discipline disparities based on putative malleable factors that explain why the phenomenon continues to exist despite policy and ongoing efforts within schools to address it. In particular, using a single case experimental multiple baseline design across schools, this study experimentally examined the impact of the GSP approach to reduce discipline disparities and promote school connection for Black male students.

Visual analysis and single case effect size estimates from the multiple baseline design graphs revealed that GSP was effective at reducing relative risk ratios across all three schools. School 1 was associated with the largest drop in risk ratio ($\Delta = 6.2$) and also started with the highest average baseline risk ratio ($M = 9.8$). School 3 was associated with the

Table 4. Acceptability and Feasibility Data Across Schools

Schools	Acceptability Items <i>M (SD)</i>				Feasibility Items <i>M (SD)</i>			
	The GREET–STOP–PROMPT intervention is an effective choice for preventing and responding to problem behavior.	The intervention is a fair way to handle the children’s behavior problems.	I would have positive attitudes about implementing the GREET–STOP–PROMPT.	Average	Preparation needed for this intervention is minimal.	The total time required to implement the GREET–STOP–PROMPT procedures was manageable.	I was able to allocate my time to implement the GREET–STOP–PROMPT intervention.	Average
School 1	5.3 (1.1)	5.4 (1.2)	5.6 (0.9)	5.4 (1.1)	4.9 (1.3)	5.0 (1.2)	5.3 (1.2)	5.1 (1.2)
School 2	5.0 (1.3)	5.3 (1.2)	5.2 (1.3)	5.2 (1.2)	4.9 (1.4)	4.9 (1.4)	5.1 (1.3)	5.0 (1.4)
School 3	4.8 (1.4)	5.0 (1.3)	5.1 (1.3)	5.0 (1.3)	4.4 (1.5)	4.5 (1.5)	4.9 (1.3)	4.7 (1.5)

Note. School 1 ($n = 17$ staff completed items); School 2 ($n = 15$ staff completed items); School 3 ($n = 18$ staff completed items).

Table 5. Intervention Fidelity Data for Each Component and Each School

Schools	GREET Adherence		STOP Adherence		PROMPT Adherence	
	<i>M</i> (<i>SD</i>)	Range	<i>M</i> (<i>SD</i>)	Range	<i>M</i> (<i>SD</i>)	Range
School 1	88% (12)	58%–100%	85% (13)	60%–100%	81% (14)	48%–100%
School 2	83% (13)	46%–100%	84% (13)	54%–100%	80% (15)	40%–100%
School 3	79% (15)	43%–100%	78% (14)	48%–100%	73% (16)	25%–100%
Average	83%	—	83%	—	78%	—

lowest risk ratio by the end of data collection ($\Delta = 1.5$) but it also had the lowest average risk ratio at baseline ($M = 2.9$). The ideal risk ratio is 1.0, meaning that Black male students and other students have equal probability of receiving an exclusionary discipline practice. Although visible and meaningful reductions in relative risk ratios were found, across all three schools relative risk ratios continued to be above 1.0 at post. In fact, for School 1, the relative risk ratio at post was 3.6, indicating that Black male students were 3.6 times more likely to be referred to the office for behavior than other students. Closer inspection of the data from this school revealed that the bulk of office referrals for Black male students at post were consistently coming from the same few teachers, suggesting a need to either provide additional support to those teachers or deliver targeted intervention to the students above and beyond the classroom-based supports.

Noteworthy findings were also observed for overall reductions in ODRs for all students (as seen in Table 5). Compared to baseline averages, office referrals were cut in half with the implementation of GSP across all three schools. With the average office discipline referral involving at least 20 min of lost instructional time and 10 min of administrator time (Scott & Barrett, 2004), this effect was associated with an average gain of 300 min of instructional time and 150 min of administrator time per school per week. Multiply this by the number of weeks in a school year and it is easy to see how this effect is substantively meaningful. The finding related to reductions in office referrals takes on increased importance when considering the research linking reductions in office referrals to improvements in student perceptions of their school climate (Mitchell & Bradshaw, 2013).

It is also important to reflect on the findings from the acceptability, feasibility, and fidelity data. First, teachers within all three schools found GSP and the corresponding practices to be feasible and acceptable and implemented the component practices with adequate fidelity. Second, comparison of data across schools revealed that School 3 was associated with the lowest means across acceptability, feasibility, and fidelity. When taking a closer look at School 3, it is evident that it had lowest relative risk ratios at baseline and the highest proportion of Black students (66%) enrolled in the school. An explanation for this finding could be that for schools with moderate relative risk ratios, such as School 3,

there is less recognition of a problem and therefore less desire or need to implement solutions to address the problem. Alternatively, disproportionality may not be as palpable in schools with a higher proportion of Black students because it is expected that more Black students will receive discipline due to being the majority minority group in the school.

One unique aspect of this study was the collection of data from a representative sample of Black male students within each of the participating schools regarding their perceptions of school connection. Hypothetically, efforts to reduce discipline disparities should not only reduce the use of exclusionary disciplinary practices but also alter how students experience, feel about, and behave in school (Osterman, 2000). Consistent with this, results suggested that there were significant pre–post increases in participating students' self-reported school connection and belonging. This finding is important considering the connection between subjective indicators of student well-being and academic engagement and performance (Walton & Cohen, 2011).

Implications

One of the main implications of this study is the potential promise of the three-step approach to develop a feasible, acceptable, and effective approach to identify malleable root causes most proximal to student behavior and inform an intervention to reduce discipline. The approach we used was modeled after that proposed by McIntosh et al. (2014), who advocated for using data about malleable intervention targets to guide the development of a multidimensional intervention. They argued that such an approach allows for theoretically driven, precise, efficient, and effective practices that target discipline disparities. Further, data gathered from teachers indicated that they found GSP to be both feasible and acceptable. Although this was not universally found across all staff in each of the participating schools, the average ratings indicated that GSP is likely to be found to be suitable and viewed as acceptable by educators. School psychology researchers and practitioners could play a pivotal role in helping identify the root causes of a number of problems encountered in schools and linking those causes to feasible and likely effective solutions.

This study has additional implications for school psychologists. We utilized both feasibility and effectiveness

parameters when selecting practices to address the identified malleable root causes. Our experience during this study leads us to believe that the balance between these two factors is critical and is a major contributing factor to the relatively high fidelity and positive outcomes. There are effective practices or programs with evidentiary support that may not be suitable for implementation in everyday school settings because of their complexity, the resources required, or other factors (Forman et al., 2013). Conversely, there are many feasible practices that could be implemented but they have limited efficacy to produce desired effects even when they are delivered with fidelity. Indeed, implementation science reminds us that selection decisions are critical to achieving desired outcomes and that multiple factors should be considered when selecting practices or programs to implement—not just scientific evidence on change in outcomes (Blase, Kiser, & Van Dyke, 2013).

As system change facilitators, school psychologists need to consider this study's findings in the context of the participating schools' existing implementation efforts. At the time of the study, all schools were actively involved in implementing SW-PBIS, as well as racial equity work that involved exploring privilege, the impact of cultural mismatch, and helping educators adopt a lens of equity. It is possible that these existing efforts provided a unique context that enabled GSP to produce desired effects. As a result, it is unclear whether GSP would be successful in schools that were not actively implementing SW-PBIS and/or engaging in racial equity work. In fact, both SW-PBIS (Vincent et al., 2015) and racial equity training (Singleton & Linton, 2014) have been identified as malleable interventions to address discipline disparities. However, it is important to note that results from the multiple baseline design showed that GSP led to reductions in risk, indicating that GSP resulted in reductions in discipline disparities above and beyond those resulting from the current level of implementation of SW-PBIS and racial equity training. The interplay between these interventions, however, remains unknown and future research should examine whether they synergistically interact to promote better outcomes than can be achieved by any one alone. Moreover, considering that the educational workforce is largely comprised of White female teachers, there is a need to more closely examine whether educator race and gender play a role in discipline disparities. Additionally, researchers and practitioners need to focus on strategic efforts to diversify a relatively homogeneous workforce so Black male students are able to see and interact with others like themselves in positions of authority and influence in the school.

Limitations and Future Directions

A number of potential limitations of this project should be considered. First, this study's findings are based on a limited number of elementary schools from a single urban school district under external scrutiny to address discipline disparities. Replication is required to determine the extent to which findings are generalizable to other elementary schools in other

contexts. Second, given the multicomponent nature of GSP and the study design used in this study, we were unable to discern which components drove the positive findings or whether the combination as a whole was needed to produce positive effects. Future research should focus on examining the specific effects of different malleable factors and their impact on reducing discipline disparities. Third, we did not gather data on other exclusionary discipline practices (suspension, removal from the classroom but not sent to the office) and it is unclear whether reductions in risk ratios would be observed with these other indicators. Fourth, the main behavioral data included in this study was ODRs, which is not a direct measure of student behavior. As a result, it is unclear whether GSP resulted in improvements in actual student behavior. Future research should examine the interventions' impact on both the use of exclusionary discipline and student behavior.

Conclusion

School-based discipline disparities are a nationwide problem that leads to opportunity and achievement gaps for Black male students and results in numerous negative consequences, including later school dropout and incarceration (Gregory, Skiba, & Noguera, 2010). This study provides preliminary evidence demonstrating the promise of an approach grounded in malleable root causes related to discipline disparities and aligning feasible and evidence-informed intervention strategies to these root cause factors. Despite decades of research documenting the problem, there is limited experimental research that has examined the impact of feasible approaches to reduce discipline disparities. As a result, there remains considerable room for future research to determine how to best remediate disparities for Black male students, such as those seen with the overuse of exclusionary discipline. Scientific research in this area will be critical to determine effective solutions that will help create equitable and just school environments for all students.

FUNDING

This publication was supported in part by funding from the John and Nancy Peyton Faculty Fellowship in Child and Adolescent Wellbeing.

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Date Received: March 5, 2017

Date Accepted: December 12, 2017

Guest Editor: Catherine Bradshaw ■

AUTHOR BIOGRAPHICAL STATEMENTS

Clayton R. Cook, PhD, is an associate professor in the school psychology program in the Department of Educational Psychology at the University of Minnesota. His research interests focus on examining factors that influence the adoption and delivery of evidence-based practices that promote student social, emotional, and behavioral outcomes.

Mylien T. Duong, PhD, is an acting assistant professor in the Department of Psychiatry and Behavioral Sciences at the University of Washington. Her research focuses on the development of empirically supported interventions that are responsive to the needs of ethnic and economic minority youth.

Kent McIntosh, PhD, is a professor in the Department of Special Education and Clinical Sciences at the University of Oregon. His research focuses on school violence prevention, bullying, school discipline, and racial disparities in school discipline.

Aria E. Fiat, BA, is a graduate student in the school psychology PhD program at the University of Minnesota. Her research is centered around the design and implementation of school-based interventions to promote resilience among students and educators in economically disadvantaged settings.

Madeline Larson, BA, is a graduate student in the school psychology PhD program at the University of Minnesota. Her research focuses on implementation of evidence-based practices to improve both the quality of routine school-based service delivery and student outcomes.

Michael D. Pullmann, PhD, is a research associate professor in the Department of Psychiatry and Behavioral Sciences at the University of Washington. His research focuses on community-based participatory research approaches in children's mental health services, education, child welfare, and juvenile justice.

Jenna McGinnis, MA, is a graduate student in the school psychology PhD program at the University of Minnesota. Her research interests include investigating factors that influence parent engagement with schools, particularly in families from minority groups.